

## **MATERIAL SAFETY DATA SHEET**

COBALT CHLORIDE, 6-HYDRATE  
CAROLINA BIOLOGICAL

Revised: 05/15/08  
Replaces: 07/10/07  
Printed: 05/20/08

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### **1. PRODUCT DESCRIPTION**

Product Name: Cobalt Chloride, 6-hydrate  
Product Code(s): 85-4950, 85-4960, 84-0622, 84-0900  
Size: 125 g, 500 g  
Chemical Name: Cobalt Chloride  
CAS Number: 7791-13-1  
Formula:  $\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$   
Synonyms: Cobalt (II) chloride, hexahydrate: cobalt dichloride  
Distributor: Carolina Biological Supply Company  
2700 York Road  
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)  
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

### **2. COMPOSITION/INFORMATION ON INGREDIENTS**

Principal Hazardous Components:  
Cobalt chloride, 6-hydrate (CAS#7791-13-1) 98-100%  
TLV and PEL units: None established

### **3. HAZARD IDENTIFICATION**

Emergency Overview: Harmful if inhaled. May be fatal if swallowed.  
Potential Health Effects:  
Eyes: May cause irritation.  
Skin: May cause irritation.  
Ingestion: May cause gastrointestinal discomfort.  
Inhalation: May cause irritation to respiratory tract.

### **4. FIRST AID MEASURES**

Emergency and First Aid Procedures:  
Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.  
Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.  
Ingestion - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.  
Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm, quiet, and get medical attention.

### **5. FIREFIGHTING PROCEDURES**

Flash Point (Method Used): Not Flammable  
NFPA Rating: Health: 2  
Fire: 0  
Reactivity: 0

Extinguisher Media:

Use media suitable to extinguish surrounding fire.  
Flammable Limits in Air % by Volume: No information available  
Autoignition Temperature: No information available  
Special Firefighting Procedures:  
Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

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Unusual Fire and Explosion Hazards: None identified

### **6. SPILL OR LEAK PROCEDURES**

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

### **7. SPECIAL PRECAUTIONS**

Precautions to be Taken in Handling or Storing: Keep container tightly closed. Store in a secure poison area.

### **8. SPECIAL PROTECTION INFORMATION**

Respiratory Protection(Specify Type):

None needed under normal conditions of use with adequate ventilation. NIOSH approved equipment should be worn if PELs are exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab apron, eye wash, and safety shower.

### **9. PHYSICAL DATA**

Molecular Weight: 237.93

Melting Point: 87C

Boiling Point: No information available

Vapor Pressure: No information available

Vapor Density(Air=1): No information available

Specific Gravity(H2O=1): 1.92

Percent Volatile by Volume: 0 (21 C)

Evaporation Rate(H2O=1): No information available

Solubility in Water: appreciable (>10%)

Appearance and Odor: pink to red powder. odorless.

### **10. REACTIVITY DATA**

Stability: Stable

Conditions to Avoid: moisture

Incompatibility(Materials to Avoid): strong oxidizing agents, alkali metals, ammonia

Hazardous Decomposition Products: hydrogen chloride

Hazardous Polymerization: Will not occur

### **11. TOXICITY DATA**

Toxicity Data: Oral Rat LD50: 766 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: lung damage

Conditions Aggravated by Overexposure:

Target Organs: respiratory system, skin

Primary Route(s) of Entry: ingestion, inhalation, eye contact, skin

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### **12. ECOLOGICAL DATA**

EPA Waste Numbers: none

### **13. DISPOSAL INFORMATION**

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.  
Always contact a permitted waste disposer (TSD) to assure compliance.

### **14. TRANSPORT INFORMATION**

Non-regulated material

### **15. REGULATORY INFORMATION**

EPA TSCA Status: On TSCA Inventory

Hazard Category for SARA Section 311/312 Reporting: Acute Chronic

	SARA EHS Sec. 302 TPQ	SARA Sec. 313 Chemicals Name Chemical List Category	CERCLA Sec. 103 RQ lbs.	RCRA Sec. 261.33
Product or Components				

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Cobalt chloride				
6-hydrate	No	Yes Yes	1	No

### **16. ADDITIONAL INFORMATION**

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

#### **Glossary**

ACGIH.....American Conference of Governmental Industrial Hygienists

CAS Number..Chemical Abstracts Service Number

CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act

DOT.....U.S. Department of Transportation

IARC.....International Agency of Research on Cancer

mppcf.....million particles per cubic foot

N/A.....Not Available

NTP.....National Toxicology Program

OSHA.....Occupational Safety and Health Administration

PEL.....Permissible Exposure Limit

ppm.....parts per million

RCRA.....Resource Conservation and Recovery Act

SARA.....Superfund Amendments and Reauthorization Act

TLV.....Threshold Limit Value

TSCA.....Toxic Substances Control Act